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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1.-5. (Cancelled)

Claim 6. (Currently Amended) A distributed control system comprising a network and at least one control unit having a communication means for connecting to said network, wherein said control unit comprises:

a message object configuration information storing means for storing a starting procedure of at least one message object having a network communication function, the message object being for performing communication processing between application programs each of which is constituted by at least one software module, and the message object configuration information storing means comprising a communication processing priority indicating a priority to execute communication processing; and

a real-time communication processing control means for executing said message object based on the priority by referring to said message object configuration information storing means;

~~A distributed control system according to claim 5~~, wherein said real-time communication processing control means is a software module executed ~~by~~in a task.

Claim 7. (Cancelled)

Claim 8. (Currently Amended) A distributed control system comprising a network and at least one control unit having a communication means for connecting to said network, wherein said control unit comprises:

a message object configuration information storing means for storing a starting procedure of at least one message object having a network communication function, the message object being for performing communication processing between application programs each of which is constituted by at least one software module, and the message object configuration information storing means comprising a communication processing priority indicating a priority to execute communication processing; and

a real-time communication processing control means for executing said message object based on the priority by referring to said message object configuration information storing means;

~~A distributed control system according to claim 5,~~ wherein said message object configuration information storing means comprises information indicating ~~any one of~~ an in-unit communication and an inter-unit communication, and ~~the~~indicating a communication processing priority in regard to the inter-unit communication.

Claim 9. (Cancelled)

Claim 10. (Previously Presented) A distributed control system comprising at least one control unit connected to a network, wherein said control unit comprises:

a module configuration information storing means for storing starting procedure of at least one software module which constitutes an application program;

a message object configuration information storing means for storing starting procedure of at least one message object having a network communication function, the message object being for performing communication processing between application programs each of which is constituted by at least one software module, and the message object configuration information storing

means including a communication processing priority indicating a priority to execute communication processing;

a module start control means for executing the software module, referring to module configuration information storing means; and

a real-time communication processing control means for executing said message object based on the priority referring to said message object configuration information storing means.

Claim 11. (Original) A distributed control system according to claim 10, wherein said module start control means is a task.

Claim 12. (Previously Presented) A distributed control system according to claim 10, wherein said module start control means is a function included in an operating system.

Claim 13. (Currently Amended) A distributed control system according to claim 10, wherein ~~programsaid~~ module configuration information storing means includes a software module information to be executed next.

Claim 14. (Original) A distributed control system according to claim 10, wherein said real-time communication processing control means is a software module executed in a task.

Claim 15. (Original) A distributed control system according to claim 10, wherein said real-time communication processing control means is a task.

Claim 16. (Previously Presented) A distributed control system according to claim 10, wherein said real-time communication processing control means is a function included in an operating system.

Claim 17. (Cancelled)

Claim 18. (Currently Amended) A distributed control system according to claim 10, wherein said message object configuration information storing means includes information indicating whether a message object is an in-unit communication or an inter-unit communication.

Claim 19. (Cancelled)

Claim 20. (Original) A distributed control system according to claim 10, wherein said message object configuration information storing means includes software module information to be executed next.

Claim 21. (Previously Presented) A control system comprising at least one control unit which includes a module configuration information string means for storing a starting means for at least one software module which constitutes an application program, a message object configuration information storing means for storing a starting procedure of at least one message object having a network communication function, the message object being for performing communication processing between application programs each of which is constituted by at least one software module, and the message object configuration information storing means including a communication processing priority indicating a priority to execute communication processing, a module start control means for executing the software module referring to said module configuration information storing means, and a real-time communication processing means for executing said message object based on the priority referring to said message object configuration information storing means; a computer having information to be stored in said module configuration information storing means; and an initializing means existing in said control unit for storing the information in said module configuration information storing

means, wherein said control unit, the computer and the initializing means are connected to a network.

Claim 22. (Previously Presented) A control system according to claim 21, further comprises a distributed control middleware code generating tool which receives system configuration information and outputs a program code composed of information to be stored in said module configuration information storing means and said module start control means.

Claims 23.-45. (Cancelled)